

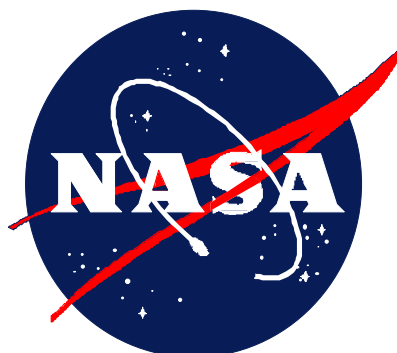
Office Work Instruction

HOWI 1230-Y004 Baseline

Effective Date: January 19, 1999

Responsible Office: YF/Program Planning and Development Division and
YO/Applications, Commercialization, and Education Division

Subject: Oversee and Evaluate Enterprise Program



OFFICE WORK INSTRUCTION

OVERSEE AND EVALUATE ENTERPRISE PROGRAM

(Conforming to ISO 9001 Quality System Requirements)

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PREFACE

The NASA Office Work Instruction (OWI) for Oversee and Evaluate Enterprise Program documents the tasks and activities in conformance with the International Organization for Standardization's (ISO) 9001 requirements for quality systems. The manual supplements the NASA Strategic Plan, Strategic Management Handbook, and other higher level NASA directives, which form the basis for how NASA conducts business.

This OWI is not intended to duplicate or contradict any other NASA policy, procedures or guidelines, which currently exist. As such, the OWI will reference prevailing documents where a topic is addressed and existing coverage is deemed adequate. Additional information provided within is intended to supplement existing documentation regarding Headquarters (HQ) implementation of strategic and program/project management, as well as HQ conformance with the ISO 9001 Quality Management System (QMS) requirements.

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1.0 PURPOSE

This OWI provides instructions on what must be done by the Program Planning and Development and the Applications, Commercialization, and Education Divisions to oversee and evaluate NASA Earth science flight, applications, technology, and commercial programs. It describes the activities that are performed for a typical program oversight and evaluation effort. The OWI describes what is to be accomplished by the process, not how the work is to be performed. Program Coordinators are expected to apply their experience, expertise, professional contacts, and knowledge in order to successfully oversee and evaluate flight programs.

2.0 SCOPE AND APPLICABILITY

2.1 Scope. This work instruction describes activities typically performed by the Program Planning and Development Division and the Applications, Commercialization, and Education Division of the NASA Earth Science Enterprise (ESE) (Codes YF and YO) when overseeing and evaluating science and applications-driven flight programs, as well as technology and commercial programs. The process described includes four (4) main groupings of activities. First, the Program Coordinator and the relevant Division Director perform and report results of ESE program evaluations, identifying areas where program and projects are violating Level I requirements. Second, the AA Control Board reviews Level I breaches and recovery options and resolves program level issues. On occasion, the AA control board may request independent assessments of programs. Third, the Headquarters Program Management Council (HQ PMC) reviews and assesses data provided by ESE and the Langley Independent Assessment Program Office (IAPO) to determine program progress and viability. Lastly, the ESE AA, the relevant Division Director, and the Program Coordinator provide their own assessment feedback that ultimately provides guidance to the center program manager.

This work instruction represents a tailoring of NPG 7120.5A, *NASA Program and Project Management Processes and Requirements*. It is designed to support a headquarters oversight and evaluation process rather than a Program Manager's management and evaluation process.

2.2 Applicability. This work instruction for Oversee and Evaluate Enterprise Program applies to the NASA Office of Earth Science offices and divisions. The Associate Administrator for Earth Science is responsible for maintaining this document. The controlled version of the manual is available on the World Wide Web (WWW) via the HQ ISO 9000 Document Library for the ISO 9000 QMS at <http://hqiso9000.hq.nasa.gov>. Any printed version of this OWI is uncontrolled (reference: HCP 1400.1, Document and Data Control). Proposed revisions of this manual will be accomplished by following HOWI 1410-Y015 (Approve Quality Documents).

3.0 DEFINITIONS

In general, the definitions given in ISO 8402 apply. Appendix B of the Earth Science Enterprise Management Handbook provides additional ESE-specific terms and definitions.

4.0 REFERENCES

The following documents contain provisions that, through reference in this OWI or in policy or procedure documents, constitute the basis for the documented procedure:

NFS Part 1835	NASA FAR Supplement, Part 1835, Research and Development Contracting
NFS Part 1872	NASA FAR Supplement, Part 1872, Acquisition of

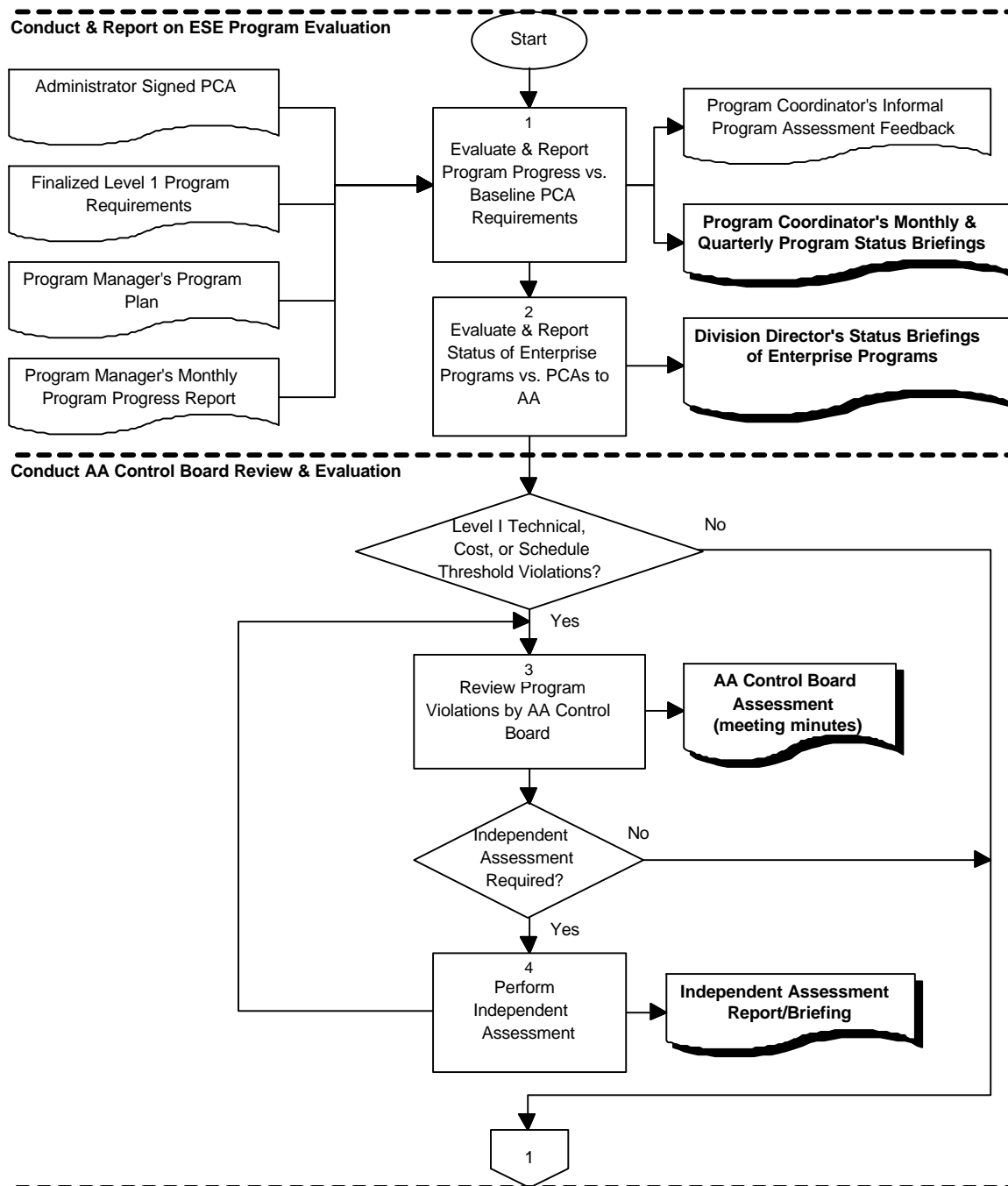
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	Investigations
NPD 1000.1	NASA Strategic Plan
NPG 1000.2	NASA Strategic Management Handbook
NPG 5800.1D	Grant and Cooperative Agreement Handbook
NPD 7120.4A	Program/Project Management
NPG 7120.5A	NASA Program and Project Management Processes and Requirements
ANSI/ASQC Q9001-1994	American National Standard, Quality Systems-Model for Quality Assurance in Design, Development, Production, Installation, and Servicing
ANSI/ASQC 8402:1994	Quality Management and Quality Assurance - Vocabulary
NPD 8730.3	NASA Quality Management System Policy (ISO 9000)
NHB 1101.3	NASA Organization Handbook

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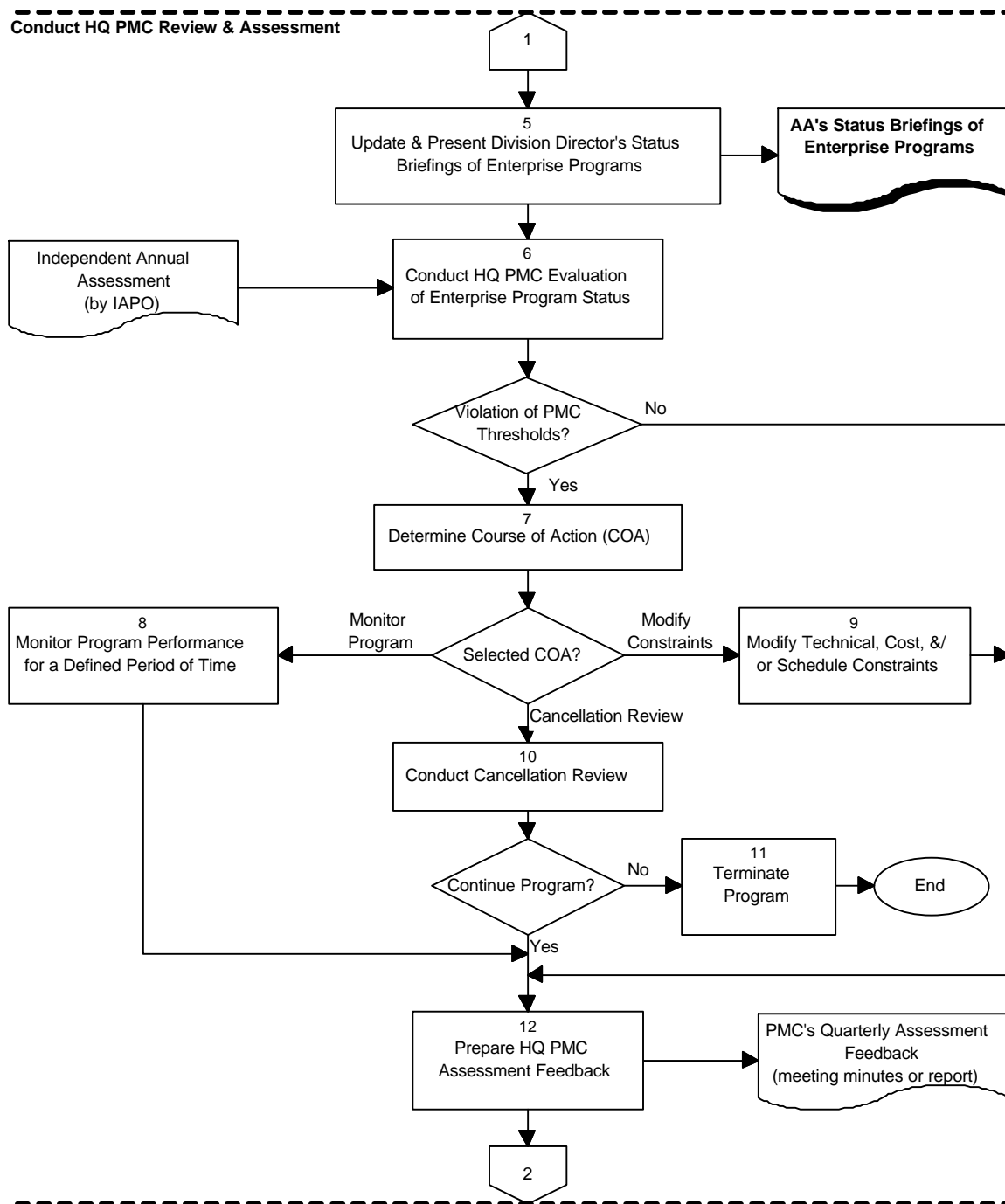
5.0 FLOWCHART

The following flowchart depicts the procedure described in Section 6. Outputs in boldface type represent the quality records listed in Section 7.



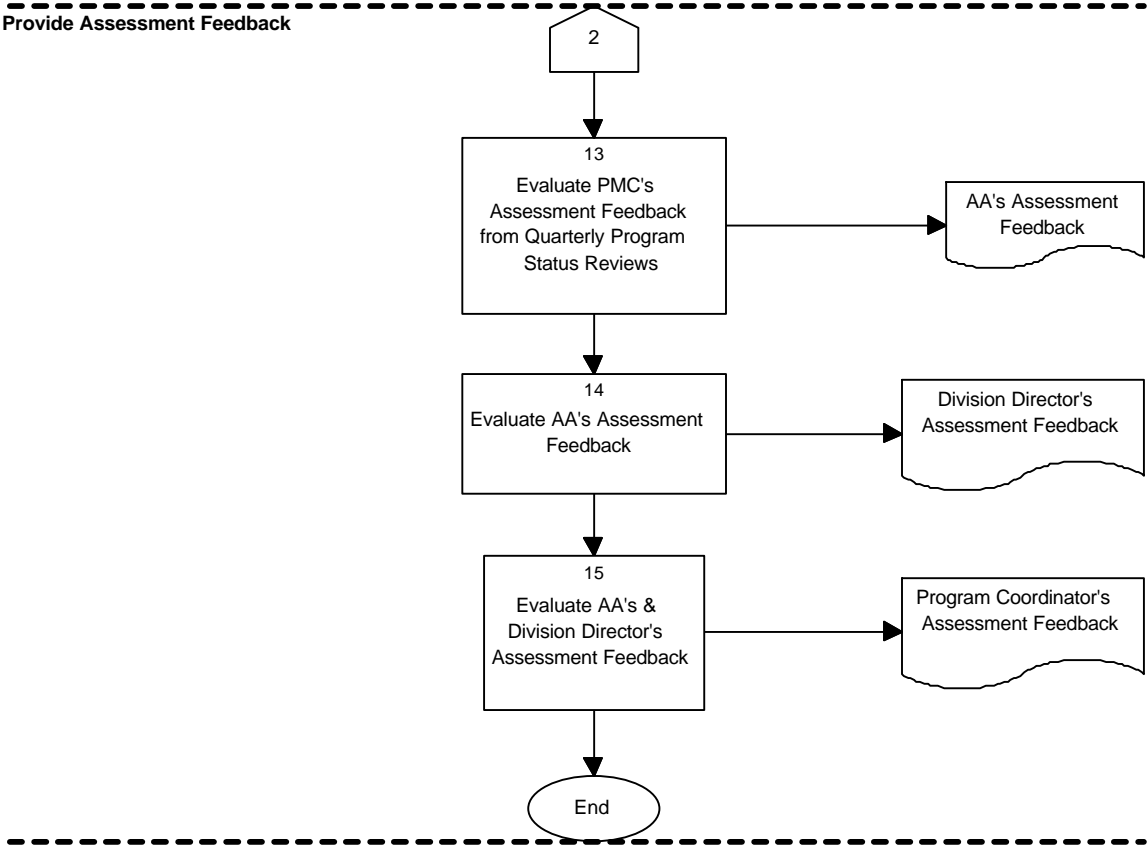
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5.0 FLOWCHART (Continued)



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5.0 FLOWCHART (Continued)



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6.0 PROCEDURE

The following table describes the flowchart of Section 5.

<u>Actionee</u>		<u>Action</u>
Program Coordinator	1	<p><u>Evaluate and Report Program Progress vs. Baseline PCA Requirements.</u> Once the assigned Program Coordinator receives finalized program requirements and an Administrator signed Program Commitment Agreement (PCA) from the Formulate and Approve Flight Program process, the Oversee and Evaluate Enterprise Program process within ESE begins. The Program Coordinator interacts with the designated center program manager on a regular formal and informal basis to obtain information on the plans for the program and its progress. Specifically, the program manager, as part of the Implement Flight Program process, submits a <i>Program Plan</i> that describes how the program is to be implemented and <i>Monthly Program Progress Reports</i> that describe the program's progress and technical, cost, and schedule performance.</p> <p>Responsibility for evaluating and reporting on the program's progress relative to the baseline PCA requirements rests with the Program Coordinator. The Program Coordinator typically performs the following tasks:</p> <ul style="list-style-type: none"> • Tracks technical, cost, and schedule progress; • Identifies Level I threshold violations • Identifies problems, issues, or concerns; • Compares the progress to the previous reporting period, the current plan, and the original plan; • Evaluates proposed plans and problem resolutions; and • Reports on the progress to the Program Planning and Development Division Director or the Applications, Commercialization, and Education Director, as appropriate, on a monthly and quarterly basis. <p>The Program Coordinator's monthly and quarterly reports typically take the form of briefings.</p> <p>The Program Coordinator also provides informal program assessment feedback to the program manager. This feedback can be via any mechanism to include the telephone and email. The Program Coordinator and program manager use the informal feedback to surface and resolve issues quickly and efficiently. The Program Coordinator also communicates results, successes, and opportunities to the education and outreach personnel who perform the Communicate Knowledge process and the individuals responsible for the Manage Earth Science and Applications process.</p>
PPDD or ACED	2	<p><u>Evaluate and Report Status of Enterprise Programs vs. PCAs to AA.</u> The Program Planning and Development Division Director (PPDD) or the Applications, Commercialization, and Education Division Director</p>

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(ACED) receives the monthly and quarterly progress status briefings for each enterprise program and formulates his/her own assessment of the progress of the ESE programs. The results of this assessment are documented in regular status briefings presented to the ESE AA. These briefings cover all of the ESE enterprise programs and are given by the appropriate division director.

If any program violates Level I technical, cost, or schedule requirements, the division director identifies them in status briefings as proposed agenda items for the AA Control Board. These program issues are presented to the AA Control Board for resolution, as requested. Programs with unresolved issues at the time of a PMC's QPSR will include in their presentation clearly defined resolution options and cost impacts.

- | | | |
|--------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AA Control Board
ESE AA | 3 | <u>Review Program Violations by AA Control Board.</u> In the event program/project activities violate or threaten Level I technical, cost, or schedule constraints, the ESE AA convenes the AA Control Board to review and assess the issues, and options, and determine a course of action. A determination is made if more data is required, if modification to the Level I requirement is needed, if no action is required or if an independent assessment is required. The AA Control Board's assessment and recommendations are documented in meeting minutes. |
| Independent
Assessor | 4 | <u>Perform Independent Assessment.</u> Should the ESE AA decide that an independent assessment is required, an independent assessor will be identified and tasked to evaluate the identified technical, cost, and schedule issues. The independent assessor prepares an assessment briefing. The independent assessment is placed on the AA Control Board agenda and the process flows back to Activity 3. |
| Program Planning
and Development
Division Director
ESE AA | 5 | <u>Update and Present Division Director's Status Briefings of Enterprise Programs for HQ PMC.</u> The appropriate division director updates his or her status briefings to reflect recommendations from the AA. The ESE AA presents quarterly to the HQ PMC. |
| HQ PMC | 6 | <u>Conduct HQ PMC Evaluation of Enterprise Program Status.</u> The HQ PMC conducts quarterly reviews of ESE programs. Additionally, the HQ PMC receives an independent annual review from the Langley Independent Assessment Program Office (IAPO) that is factored into the HQ PMC's review of ESE programs. The HQ PMC, like the ESE AA, looks for violations of HQ PMC specified technical, cost, and schedule thresholds. If no thresholds are violated, the process proceeds to Activity 12, Prepare HQ PMC Assessment Feedback. In the event thresholds are violated the process proceeds to Activity 7, Determine Course of Action (COA). |
| HQ PMC | 7 | <u>Determine Course of Action (COA).</u> When technical, cost, or schedule thresholds are violated, the PMC typically has three basic courses of action that can be followed. It can monitor the program for some specified period of time (see Activity 8) to see if the program manager can resolve the issues in a satisfactory manner. If appropriate, the PMC can modify the program's technical, cost, and |

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- schedule constraints (Activity 9), so that there is no longer an issue. Alternatively, if the issues are serious enough, the PMC can choose to initiate a Cancellation Review (Activity 10).
- HQ PMC 8 Monitor Program Performance for a Defined Period of Time. In this activity, the PMC monitors the program's performance more closely and frequently for a specified period of time. This is to see if the program manager can resolve the identified technical, cost, or schedule issues. The program's progress is reviewed at a subsequent quarterly or annual PMC review.
- HQ PMC 9 Modify Technical, Cost, &/or Schedule Constraints. In some cases, it is appropriate to change the program's technical, cost, or schedule constraints. Making these changes often requires analysis and review to determine what changes must be made. This also frequently requires preparation, submission, evaluation, and acceptance of engineering or requirements change proposals.
- Cancellation Review Team 10 Conduct Cancellation Review. If the PMC determines the technical, cost, or schedule issues are sufficiently severe, it may order a Cancellation Review. The PMC forms a Cancellation Review Team. This team investigates the program and prepares a recommendation to continue or cancel the program. The PMC reviews the recommendation and makes its decision.
- HQ PMC
- ESE AA 11 Terminate Program. If the PMC decides the program should be cancelled, the ESE AA terminates the program.
- HQ PMC 12 Prepare HQ PMC Assessment Feedback. Based on its review of the AA's quarterly status briefings and results from the selected course of action, the PMC prepares its assessment feedback. This is documented via meeting minutes that are sent to the ESE AA.
- ESE AA 13 Evaluate PMC's Assessment Feedback from Quarterly Program Status Reviews. Once the HQ PMC submits its feedback from the quarterly and annual assessment of ESE programs (in the form of meeting minutes), the ESE AA evaluates the HQ PMC's assessment feedback and prepares his or her own assessment. The ESE AA's assessment feedback includes the assignment of actions and is then forwarded to the appropriate Division Director.
- PPDD or ACED 14 Evaluate AA's Assessment Feedback. The relevant Division Director receives the ESE AA's assessment feedback and assigned actions, and then prepares his or her own assessment feedback that elaborates on the AA's assessment and action assignments. The Division Director's assessment feedback is distributed to the Program Coordinator, the program manager, and the individuals responsible for the Communicate Knowledge and Manage Earth Science Applications Research processes.
- Program Coordinator 15 Evaluate AA's and Division Director's Assessment Feedback. The Program Coordinator receives and evaluates the assessment feedback and actions provided by the ESE AA and the relevant Division Director. The Program Coordinator in turn develops a plan, in coordination with the program manager, to respond to assigned

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actions. This concludes the Oversee and Evaluate Enterprise Program process until it starts anew with the next *Monthly Program Progress Report* from the program manager.

7.0 QUALITY RECORDS

RECORD IDENTIFICATION	OWNER	LOCATION	MEDIA ELECTRONIC / HARDCOPY	RETENTION	DISPOSITION
Program Coordinator's Monthly and Quarterly Program Status Briefings	Program Coordinator	PPDD or ACED as appropriate	Hardcopy	Retain for 2 years after completion, cancellation, termination, or suspension of the program.	Retire to Federal Records Center. Transfer to National Archives and Records Administration 10 years after subject event or when 25 years old whichever is sooner.
Division Director's Status Briefings of Enterprise Programs	PPDD or ACED	PPDD or ACED as appropriate	Hardcopy	Retain for 2 years.	Retire 1 copy to Federal Records Center. Destroy when 8 years old.
AA Control Board Assessment (meeting minutes)	AA Control Board	PPDD or ACED as appropriate	Hardcopy	Retain for 2 years.	Retire 1 copy to Federal Records Center. Destroy when 8 years old.
Independent Assessment Report/Briefing	Independent Assessor	PPDD or ACED as appropriate	Hardcopy	Retain for 2 years after completion, cancellation, termination, or suspension of the program.	Retire to Federal Records Center. Transfer to National Archives and Records Administration 10 years after subject event or when 25 years old whichever is sooner.
AA's Status Briefings of Enterprise Programs	PPDD	PPDD or ACED as appropriate	Hardcopy	Retain for 2 years.	Retire 1 copy to Federal Records Center. Destroy when 8 years old.